

Life is a brief master —  
An episode,  
A tick of the clock.  
There is so little time  
To learn from the past.

## POSTLUDE

. . . to the Adam and Eve Story

└ Frozen Mammoths . . .  
└ The Grand Canyon . . .  
  The Jura Mountains . . .  
    Tiahuanaco . . .  
      Bode's Law . . .  
        Baalbek . . .  
          Sacsahuaman . . .  
            Easter Island . . .  
              Niagara Falls . . .  
              St. Anthony's Falls . . .  
              Shanidar Cave . . .  
              Gilgamesh . . .  
              The Greek Alphabet . . .  
              The Trigger . . .  
              The Next Cataclysm . . .

by Chan Thomas

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Slowly, painstakingly, we are still putting the pieces of the puzzle together. The more pieces we find which fit into the picture, the more colorful and dramatic the picture becomes.

I wish we had the funds to dig and search for three years in Tiahuanaco. A small idea of what could be found in this prehistoric city of South America can be gained by reading two books, both written by Hans Schindler Bellamy and Peter Allan: "The Calendar of Tiahuanaco" and "The Great Idol of Tiahuanaco". The conclusions drawn through those monumental works are startlingly close to mine: the city has lived through at least three epochs, the oldest ending about 11,500 years ago, terminating — with a cataclysm — the period in its history when it was at sea level, and starting a period of about 5,000 years during which it was at the bottom of the Pacific; then an upheaval of about 6,500 years ago, when it was raised with its ocean floor home to its present altitude of 12,500 feet during the cataclysm which produced Noah's flood, gave birth to Niagara Falls, started the Ohio River flowing into the Mississippi, started the Neolithic stone age, raised the level of the oceans more than 200 feet all over the world, initiated the era of modern history on the earth — such as that of Greece, Egypt, and India — and gave birth to "The Epic of Gilgamesh", containing the story of Noah's flood written by the Sumerians thousands of years before the Hebrews wrote about it in Genesis.

Each cataclysm is like a giant hand sweeping across the countryside, leaving its fingerprints for us to find as we sift through the evidence in our search for the solution to this consuming mystery.

These fingerprints sometimes are well hidden amongst the heavy footprints of uniformitarian evidence. The two disciplines — uniformitarian geology and cataclysmology — find no real contest between them; they complement each other, and actually a marriage of the two schools is in order.

Some of the cataclysmic fingerprints have been mentioned in Chapter II. Let's discuss them in more detail.

The story of frozen mammoths is intriguing indeed. No frozen mammoth was ever found in ice; all have been found in frozen mud. Perhaps the most noted of the thousands found thusly is the Beresovka mammoth, found near the Beresovka River in northern Siberia. Like all mammoths found wherein some comment was made concerning the skull, it was noted that its skull was pink from hemorrhaging in the head, denoting death through suffocation by drowning in the mud.

The Beresovka mammoth was found about 1900, and more scientific data was gathered and recorded about this animal than any other such



frozen behemoth. It appears that this beast also has initiated more scientific controversy than any other such find. To my way of thinking, one man's work stands far above all others: Ivan T. Sanderson, the biologist. He approached the problem from a frozen foods viewpoint — and was the first to do so. This is his story:

When you freeze meat, the problem is to freeze it fast enough so the moisture contained in the meat does not have time to form into large crystals while freezing. The faster the freeze, the smaller the crystals. If you freeze meat too slowly, the moisture will form crystals large enough to destroy the fibrous structure of the meat; when defrosted, the meat will be nothing more than a mass of goo, unfit to cook or eat. The larger the piece of meat to be frozen, the more difficult it is to freeze it fast enough to avoid formation of the destructive moisture crystals, for heat must be removed at the same rate from, say, half a steer as from half a pound of ground meat. It would be the same problem if you had to freeze a bucket of water in the same time it takes to freeze a thimbleful.

Now a mammoth weighs up to *five tons*. The Siberian mammoth was smaller, but still a several-ton animal. When the Beresovka mammoth was dissected by Russian scientists in 1901, they recorded that even the innermost lining of the beast's stomach had a perfectly preserved fibrous structure, indicating that body heat had been removed from the mammoth by some superprodigious process in nature.

Sanderson, taking special notice of this one point, took the problem to the American Frozen Foods Institute: What does it take to freeze an entire mammoth so that moisture crystallization does not have time to form in the inner lining of its stomach?

The Institute really attacked this problem. To freeze a quarter or half a steer presented a big enough problem — but a *whole mammoth!*

Some weeks later the Institute went back to Sanderson with the answer: It's utterly impossible. With all of our scientific and engineering knowledge, there is absolutely no known way to remove the body heat from a carcass as big as a mammoth fast enough to freeze it without moisture crystals forming in the meat. Furthermore, after exhausting the scientific and engineering techniques, they looked to nature and concluded that there is no known process in nature which could accomplish the feat. So many have loosely claimed that the Beresovka mammoth "fell in a crevasse" or "fell in the ice" or some such nonsense. There is absolutely, positively, irrevocably no explanation in the known processes of nature to explain the quick-freezing of the Beresovka mammoth — *and* the muck in which he was suffocated and drowned.



The Institute did tell Sanderson what it takes to do the job, however. First of all, the body temperature of the mammoth must be lowered about 140° from its normal temperature, and it must be accomplished in an absolute outside time limit of approximately four hours. Actually, they concluded, the freezing process would have to take place in an elapsed time closer to two hours. In order to accomplish this impossible feat, be it in two or four hours, an infinite supply of cold would be necessary — and not just ordinary ice-cold cold, but closer to 80-degrees-below-zero cold.

Moreover, after the mammoth was drowned in muck and quick-frozen in and with it, he had to be kept at that subzero freezing temperature for thousands of years to be preserved as he was when discovered in 1900.

The whole process bespeaks of an inhuman, supernatural violence: one foreleg, some ribs, and its pelvis were fractured; it was buried in muck alive, suffocated and drowned in the muck, and quick frozen in an utterly impossible sequence of events — but nonetheless the process was performed — then kept frozen for thousands of years.

Where did the muck come from? This frozen mud can be found all over Northern Siberia and Alaska. In Alaska the frozen blanket ranges from twenty to ninety feet thick. Where we have been able to study this frozen tundra more closely, here in the United States, the evidence shows that the supernatural violence included supersonic winds, volcanic eruption, swift inundation creating the muck, sudden temperature change to subzero freezing, and a precipitous total environmental climatic change. The muck comes from the inundation waters moving so swiftly and in such fantastic quantities that the water picks up all kinds of earth, mixes and homogenizes it with the water, then lays it down in the muck layer. Vivid descriptions of this layer of frozen muck are given by Prof. Frank C. Hibben in his book, "The Lost Americans".

One of the best places to study many layers of muck laid down by many cataclysms is in the walls of the Grand Canyon, or in the Badlands of North Dakota. If you stand on the north rim of the Grand Canyon, pick one strata to follow, and trace it with your eyes as far as you can see in all directions — including the spires jutting upward in the canyon — you will find that strata homogenous from top to bottom, laid down with uniform thickness, and sharply demarcated from the layers above and below it. Furthermore, if you happen to pick a layer that contains gravel and rocks interspersed through it, you will observe that rocks, boulders, and gravel are distributed throughout the layer quite evenly, top to bottom.



There is absolutely only one way for each layer to have been laid down so evenly and so homogeneously: all at once. All other hypotheses fade into oblivion in light of the homogeneity factor. This conclusion as to the suddenness of the deposit, based on the homogeneity factor, is strengthened further by the flatness, uniformity of thickness, the independent character of each layer, and the sharp demarcation between layers.

Anyone in the earth-moving business who looks at these strata with the suddenness of deposit of each layer in mind will immediately realize that there is absolutely no way to accomplish this feat through any known means of engineering — nor is there any known way in the ordinary processes of nature to move that much earth, homogenize it — even with rocks and boulders if necessary — and deposit it all at once. The only way possible is for cubic miles upon cubic miles of water to move at fantastic speeds over continents, pick up earth — dirt — in unbelievable quantities, mix it with the water into a watery mud, and finally deposit it all at once in a layer of "homogenized" muck which later dries out, and through the ages sometimes ossifies.

A good measure of the speed with which the water must move over the land is provided for us by the granite blocks on the eastern slopes of the Jura mountains in France. DeLuc Sr., VonBuch, DeLuc Jr., and DeSaussure give us much information through their early geological observations of the dispersion of the Alpine granite blocks through the mountains, valleys, and lakes of Italy, Switzerland, and France. Even Bakewell, through his early dissenting observations, lends more credence to the fast-moving water conclusions of the other men because of his loose arguments.

The great Swiss geologist Escher gave the most credence to the water argument through his observations, which support the earliest concepts set forth by J. Andre DeLuc Jr. in the 1820's.

Let us envision the Jura mountains as if we were looking down from an airplane. First of all we'd notice that they are similar to the Allegheny mountains in Pennsylvania, for they look like a giant, wrinkled-up carpet with rolling ridges running from northeast to southwest; the Swiss-French border follows the same direction in the middle of the range. You can also see that the ridges have passes through them here and there, so that a person on the ground can see northwest through one ridge to the southeastern slope of the next ridge in many places. It's a well-known fact that the Jura mountains are non-granitic. Whatever granite exists in the mountains is still buried deep in them; they are largely calcareous. However, on the eastern slopes of the ridges there are countless granite



blocks sitting on the surface. These blocks, each weighing tons upon tons, have been traced to the Alps, across the Swiss valley to the southeast. If you look several ridges to the northwest in the Juras, you will find the granite blocks *only* on the southeastern slope of the ridge, and clustered *only* opposite passes through the ridge adjacent to the southeast. These blocks sit on the slope at an altitude not much lower than where they came from in the Alps of Switzerland and Italy, 50 to 80 miles across Switzerland.

In order for them to be found on the southeastern slopes of the Juras where they are, a tremendous upheaval of granite in the Italian-Swiss Alps had to occur during some cataclysmic violence, followed by water moving at such fantastic speeds as to sweep the mighty blocks of granite from 50 to 80 miles across Switzerland, over the Juras, through the passes and deposit them in clusters against the southeastern slopes of the inner ridges.

It fits perfectly with the picture of supernatural violence uncovered by Prof. Frank C. Hibben in his studies of shredded and dismembered prehistoric animals in Alaska, buried and frozen in muck with twisted, torn, and burned trees. Hibben states that one necessary force in the contributing factors is supersonic winds. The only possible means of generating such winds over tremendous areas of land is to move the land in such a way as to depart from its normal west-to-east daily rotation so the atmosphere, continuing its normal rotation, will then be moving at supersonic speeds relative to the land over which it is moving.

Now in the earth's normal daily rotation, the oceans also rotate west to east once per day. When a cataclysm occurs, the shell of the earth slips in a direction differing from that of its normal rotation; the atmosphere continues its normal rotational direction; and the oceans also refuse to change their rotational direction. They proceed to move over land masses which are passing underneath them in a new direction — some of the oceans moving at supersonic speeds with respect to the land beneath. With oceans moving over land masses at such speeds, it's easy to understand how the huge granite blocks were moved from the Alps to the Juras while losing very little altitude, and how cubic miles of earth can be picked up, mixed with water and homogenized, then laid down in an even, flat, independent layer such as we find in the Grand Canyon. Further, we can understand how the irresistibly, overwhelmingly annihilating force of the waters moving at utterly unbelievable speeds can, in the blink of an eye, obliterate entire civilizations and every vestige of anything they ever accomplished. Even in our times there have been occasions when a simple dam's breaking and releasing its waters over a



small town below literally wiped out every splinter of evidence of the town and people having been there.

One of the fingerprints which the giant cataclysmic hand leaves, telling us of this supernatural violence on the earth, is the plethora of mammalian teeth found in the sharp demarcation boundary between earth strata such as we see in the Grand Canyon. It bespeaks of animal life being pulverized to bits, with teeth the only mammalian substance hard enough to withstand the onslaught.

Some places undergo less violent winds and inundation, to be sure; and there we find traces of prehistoric civilizations which had advanced to achievements we deem impossible for that many years ago. Let's go back to Tiahuanaco, in South America, to see what's there.

The Incas discovered this deserted city at 12,500 feet altitude on the shores of Lake Titicaca in the second century A.D. Although they lived in that land for generations upon generations, centuries after centuries, they left it virtually undisturbed. Anyone who has been on a hunt for gold or treasure in the mountains — as I have in New Mexico — knows the Indian philosophy that "what is in the mountain belongs to the mountain." What they find they do not disturb nor destroy.

You can read about it, see it portrayed in movies, or be told about it, but there is absolutely nothing like seeing it in person when gold fever takes over an entire personality. It's a kind of consummate greed which changes a veteran outdoorsman to a wild-eyed, scheming, secretive, intense introvert who could lead himself and others to destruction and death through his greed. I have seen it.

Tiahuanaco was found by Pizarro and his band of plunderers in the 1520's. The gold fever had evidently taken over his entire expedition of 13 to 16 men, for they proceeded to vandalize almost everything in sight. They smashed thousands of statues searching for gold. There were huge silver bolts of up to several tons each, passing through massive stone monoliths. You guessed it: they broke up the monoliths in order to obtain the silver bolts.

There was one member of the early discoverers, a Spanish priest, Diego de Alcabaso, who wrote down what he saw:

"I saw a vast hall carved on its roof to represent thatch. There were the waters of a lake which washed the walls of a splendid court in this city of the dead, and, standing in its fine court, in the shallows of the water, on the platform of a superb colonnade were many fine statues of men and women. So real they were that they seemed to be alive. Some had goblets and upraised drinking-cups. Others sat, or reclined, as in life.



Some walked in the stream flowing by the ancient walls. Women, carved in stone, dandled babies in their laps, or bore them on their backs. In a thousand natural postures, people stood or reclined."

Not one of these statues stands today. The greed of civilization has literally devastated Tiahuanaco with vandalism and thievery.

However, vandals through the centuries who visited this fabulous storehouse of prehistory did what most do who have the treasure fever — they ignored the intellectual values which were less obvious. The great stone gate in the temple of Kalasasaya has inscriptions across its arch which, to the untrained eye, appear to be but meaningless picture carvings. It remained for Arthur Posnanski to realize its importance; he was followed by Wendell Bennett and John Phillips; then Hans Schindler Bellamy and Peter Allan completed the picture with their brilliant deciphering and translation of the pictures, so aptly described in their book, "The Calendar of Tiahuanaco". Their later work, "The Great Idol of Tiahuanaco", evinces further their brilliance in deciphering and translating the picture-symbols carved in a monolithic statue excavated from a buried temple. The only thing they don't explain is why this huge statue has two left hands and no right hand!

The works of Bellamy and Allan show many things concerning the calendar and time standards of Tiahuanaco in two different epochs, probably the Caspian and Hudson Bay eras. The details of the differences between hours, days, and years then and now I shall leave to those who wish to read those books. The main point of their discussion worth noting here is that the Idol and the Calendar, in both eras, recorded the orbiting of a retrograde moon-satellite around the Earth which is not there today. During the Idol's era — probably 29,000 to 18,500 years ago - the satellite was approximately 24,150 miles from the Earth; during the Calendar Gate's era — probably 18,000 to 11,500 years ago — the satellite was approximately 23,360 miles from the Earth.

Obviously the moon-satellite was far closer to our planet than our present moon. Obviously it passed the Roche limit of approximately 8,000 miles from the earth and disintegrated.

Where did that moon-satellite come from? How did our planet capture it? And where did our present moon come from? When did our planet capture it? If Tiahuanaco is to make any sense, these questions must be answered.

The Bode-Titius relationship may give us a key to the answer. Titius and Bode, two German astronomers, discovered this relationship in the eighteenth century. If we take ring numbers, or orbit numbers, of the planets through Saturn (0, 1, 2, 4, 8, 16, 32), multiply each number by 3,



add 4, divide by 10, the series becomes 0.4, 0.7, 1.0, 1.6, 2.8, 5.2, and 10.0. These numbers represent the relative distances of the then known planets from the Sun — Mercury, Venus, Earth, Mars, Jupiter, and Saturn — with 2.8 representing a void with no known planet at that distance. When the planet Uranus was discovered in 1781, it fit right into the series at 19.6; the "law" seemed strengthened, and an intense search was started for anything that might be at the 2.8 distance. In 1801 the little planetoid Ceres was found at 2.8; by 1945 more than 1,500 more were found on the same orbit. It has been well established as the ring of minor planets, or planetoids, or asteroids. In 1846 Neptune was discovered — and it seemed to disobey the rules set down by Bode and Titius. It should have been at 38.8 on the relative distance scale — but it was closer to 29.2. In 1930 Pluto was discovered, and Bode-Titius seemed to fall apart, for Pluto was found close to 38.8, where Neptune was supposed to be, whereas the Bode-Titius "law" seemed to indicate that Pluto should be at 77.2. Since then the relationship, commonly known as "Bode's Law", has been regarded in astronomy as nothing more than an insignificant curiosity.

Perhaps a new look at Bode's law is in order. If so much of it is correct, then perhaps the part which appears to be erroneous seems to be so only because of our lack of understanding of the basics involved.

First, instead of using relative distances, we shall work with ring numbers, or orbit numbers. The first progression (0, 1, 2, 4, 8, 16, 32, etc.) represents these numbers. Also, instead of this progression — which is geometric except for the zero — let's fill in *all* of the numbers, making a true arithmetic progression. The numbers will be 0, 1, 2, 3, 4, 5, 6, 7, 8, and so on to 256.

Now in this progression the ring numbers 0, 1, 2, 4, 8, 16, 32, 64, 128 and 256 can be regarded as fundamental rings. All other rings can be regarded as harmonic rings. Between any two fundamentals, the ring which lies halfway between is the first harmonic; any ring which lies halfway between a fundamental and a first harmonic is a second harmonic; any ring halfway between a second harmonic and a first harmonic, or a second harmonic and a fundamental, is a third harmonic, and so on.

The next step is to label the ring numbers with the planets *as they actually are positioned* in the Solar system. We can simplify the table if we take all of the ring numbers up to 8, then only the fundamentals, 1st, and 2nd harmonics beyond that to Uranus; then the fundamentals, 1st, 2nd, and 3rd harmonics to ring #256.



The first thing we notice is that all of the planets are on fundamentals except for Neptune. It's the only one of all the planets which is on a harmonic ring, as it appears on the first harmonic between Uranus and Pluto, which are on fundamentals 64 and 128 respectively.

Now we come to another discovery. The number of rings between planets increases the farther away from the Sun the planets are, until it appears that the maximum number of rings possible between planets is 31. On each 32nd ring there has to be a planet whether that ring is a fundamental or harmonic. That's why Neptune is on a harmonic, the 32nd ring after Uranus, with Pluto on the 32nd ring after Neptune.

Something else appears apparent also: When the Solar system was born, planets tried to be born on each ring. Full-blown planets were born on every fundamental, and on any harmonic ring 31 rings away from any other planet. On all other rings, minor planets were born, or a ring of planetoids. Since there are four major planets inside the planetoids on ring #8, let's assume that the entire system is made up of three groups of four major planets plus a ring of planetoids in each group. This means that there may be two more undiscovered planetoid rings, #112 and #240. If we look at the minor planet rings on either side of Jupiter, and apply Kepler's laws to them, we find that the moons of Jupiter — even the retrograde ones — are explained as captured minor planets from both inside and outside rings around Jupiter.

Before we examine the result of our construction, let's look into the outer unknown regions of the Solar system: Ring #256 is where the comets turn around and head back into the heart of the system. Further, it is known from the perturbations in Pluto's orbit that there is more than one planet outside Pluto; our table tells us that there should be three planets on rings #160, #192, and #224. The total number of rings tells us that there is a fantastic number of captured and uncaptured minor planets yet to be discovered. The junk of the Solar system!

Now let's look at the abbreviated table of the Solar system — the first orderly interpretation of Bode's Law:



<i>Planet</i>	<i>Fund.</i>	<i>Ring Numbers</i>		
		<i>1st Harm.</i>	<i>2nd Harm.</i>	<i>3rd Harm.</i>
Mercury	0			
Venus	1			
Earth	2			
Moon		3		
Mars	4			
Phobos			5	
Deimos		6		
Lost			7	
Planetoids #1	8			
			10	
		12		
			14	
Jupiter	16			
			20	
		24		
			28	
Saturn	32			
			40	
		48		
			56	
Uranus	64			
				72
			80	
				88
Neptune		96		
				104
Planetoids #2			112	
				120
Pluto	128			
				144
X <sub>1</sub>			160	
				176
X <sub>2</sub>		192		
				208
X <sub>3</sub>			224	
Planetoids #3				240
?	256			

It's apparent that our present moon was created on ring #3, Phobos on #5, and Deimos on #6. Ring #7 is vacant. That presents a real challenge. Whatever happened to the minor planet from Ring #7?

The closeness of Phobos and Deimos to Mars tells us that rings #4, #5, and #6 closed together a tremendous amount, most probably through



a succession of events in the Solar system causing the series of cataclysms on the Earth. It is logical that ring #7 also would have closed toward Mars' ring so that Mars would have captured the minor planet from ring #7 as well as Phobos and Deimos. Once orbiting around Mars, "Lost" could have come close enough to the Earth to be stolen from Mars by the Earth and be the moon-satellite so well described on the Idol and Calendar Gate of Tiahuanaco.

The multitude of legends springing from the cataclysm of 11,500 years ago about "Venus moving into orbit" or "Venus changing her orbit" most probably describe the capture of our present moon from ring #3 — which in its day, eons ago, evidently was a pretty fair planet orbiting around the Sun.

In any case, the now vacant ring #7, the records from Tiahuanaco of a retrograde-orbiting moon, the plethora of impact craters on the moon and Mars, and the mountains of dense material buried in the mantle of the Earth as uncovered by perturbed orbits in our man-made satellites, and Bode's Law, expanded to include harmonics, now offer an orderly meaning to us.

Instabilities in the Solar System which lead to capture of minor planets by major planets may seem impossible or improbable; however, if we consider one minor instability in the Solar System, in the earth's rotation, we can believe that major changes in stability are possible. You can find it in Encyclopaedia Britannica: mention is made of two astronomically abrupt changes in the Earth's rotation within the last hundred years. This planet of ours is not an inertia] body — it's a complex motor-generator system, as is the Solar system, the Milky Way galaxy, its parent supergalaxy, and the Universe in which we live. Astronomers of Tiahuanaco recorded stability changes on the Gate and Idol.

In the light of the fantastic stonework in Tiahuanaco characterizing the civilization which ended about 11,500 years ago, we can look at other great prehistoric works in stone which stand as mysterious monumental memorials to lost engineering techniques: Baalbek, in Lebanon — formerly known as Heliopolis — where three huge stones are fitted together to make a platform 300 feet long. The mate to the largest stone still lies in a quarry southwest of town. That mate, believe it or not, weighs over 1,200 tons! What fantastic event would cause this prehistoric civilization to leave its tools figuratively hanging in midair? And Sacsahuaman, Peru, where a 20,000 ton monolithic block of stone lies with its steps upside down, overturned by some prehistoric, supernatural



wrath of nature; and there, as immobile as the silent boom of the kettle drums of eternity and space, stand walls of incredibly fitted huge stones.

We hear so much about the stone statues of Easter Island. There is also a wall of gigantic, precisely fitted stones, suggestive of the same civilization as Sacsahuaman and Baalbek. Giant stone statues are not exclusive to Easter Island; they can be found in the Tuamotu Archipelago, on Nukuhiva, Fatuhiva, Rivavae, and Pitcairn; and in Colombia, Ecuador, Peru, and Bolivia. Those statues on Easter Island which were buried up to their necks and recently excavated showed a geological environment the significance of which escaped the excavators. The lessons learned from the stratas in the Grand Canyon teach us to look for homogeneity — and there it is in the dirt walls of the excavations around the gigantic statues. They were all buried at once in a fantastic inundation. It appears to be the reason for the tools being figuratively left in midair in the quarries of Easter Island as well as in Baalbek and Tiahuanaco.

Mother nature performs her own works in stone which can serve as time-clocks for us. Take Niagara Falls, for instance. When the falls first started, the river flowed over a cliff where the mouth of the gorge below the falls is today. There was no gorge. As the years went by the water broke away the cliff bit by bit, year by year, century by century, to form the seven-mile long gorge which reposes below the falls today. For the past 100 years the breakaway of the Canadian falls has averaged approximately 4.5 feet per year. When the falls were young — when the gorge's first 3 to 5 miles were being carved out by the river — the breakaway was faster since the falls were narrower, the depth of water passing over the cliff deeper, and the height of the cliffs greater. A reasonable early breakaway figure would be 6.0 to 6.1 feet per year, which would make the age of the gorge about 7,000 years — the birth of the falls coinciding with oceanographic data which tells us that the oceans all over the world took a sudden rise of over 200 feet, and stayed risen, since then gradually lowering in height to their levels of today,

St. Anthony's Falls in the upper Mississippi River in Minnesota bears another telltale story in nature's series of recording time-clocks. The gorge below those falls is 8 miles long; over the past century the breakaway has averaged 5.5 feet per year. If we repeat the same reasoning processes that we used in analyzing the gorge below Niagara Falls, we come up with the same figure for the age of the gorge below St. Anthony's Falls: approximately 7,000 years.

These datings, plus others — such as varve (earth strata) counts in New Jersey and Minnesota, and the time of the eruption of lava around



the Pyramid of Cuiculilco in Mexico — lead us to a date for the last cataclysm of about 6,970 years ago.

Earlier datings — 11,500 years ago for the abrupt end of the Laurentian basin ice cap in Canada and the ice cap in southwestern Australia, plus the same date for the jamming burial of countless animals, fish, mammals, birds, and humans in the Pejark marsh in southeastern Australia, plus the same date for the abrupt end of civilization in Tiahuanaco by an inundation, plus scientific data from all over the world showing an abrupt world-wide climatic change at the same time, establish 11,500 years ago as a close estimate for Adam and Eve's cataclysm, the one preceding Noah's flood. If we accept Tiahuanacan dating, it was 11,520 years ago.

Meagre data shows the previous cataclysm to have been approximately 18,500 years ago; and the one previous to that 29,000 years ago; and thanks to the work of the mathematician Jess Hale in the structures of nature, we can compute the one previous to that at 43,750 years ago. The mathematical function is that of a helicoid.

Of all of the correlations of data I regard one of the most striking to be that of Shanidar Cave in Iraq. The Smithsonian Institution expedition, headed by Ralph S. Solecki, and the Iraqui Directorate—General of Antiquities shared in this work. Carbon-14 datings showed the boundaries between layers laid down by successive civilizations to be commensurate with the dates of cataclysms of 7,000, 11,500, 18,500, and 29,000 years ago; plus the incredible fact that no Carbon-14 was deposited in the cave during the Caspian Sea North Polar era from 29,000 to 18,500 years ago. It is entirely logical, since the cave would have been so close to the pole as to plausibly be closed off by ice; consequently no living matter could enter it — and it takes living matter to absorb Carbon-14 for us to find and date. This crude cave is as much a memorial to the last four cataclysms as Tiahuanaco.

Speaking of memorials, has anyone ever lived through a cataclysm and written of his experience, leaving a personal memorial to the occasion? Of course! If we first look at Genesis, *three* cataclysms are mentioned there: Noah's flood, the last one; Adam and Eve's — 11,500 years ago; and the previous one of 18,500 years ago, mentioned in Genesis II, 4.

Two other stories are not so well known, however — and they are most intriguing. One is from the last cataclysm, and the other from the previous one of 11,500 years ago.

In 1849 Austen Henry Layard started excavating the mound of Kuyunjik on the banks of the Tigris River. It was there that he discovered



the fabulous city of Nineveh, previously known only through the Old Testament. He discovered the palace built by the bloody emperor Sennacherib. Assurbanipal, a grandson of Sennacherib by one of his concubines, added a library to the palace, and put 30,000 clay tablets in it. Among the stones were twelve comprising the Epic of Gilgamesh — a man who was then a legendary king of the first dynasty of Erech, closely following the great deluge. He has since been shown to be a real human being.

Gilgamesh sought the secret of eternal life, driven to do so by the death of his friend Enkidu. He was told that he should find a man by the name of Utnapishtim, who had been granted eternal life by the gods.

He found Utnapishtim, whom Gilgamesh successfully persuaded to tell his story. Utnapishtim stated that indeed, he had been granted the secret of eternal life, and told by the gods:

"O man of Shuruppak, son of Ubar-Tutu,  
Abandon wealth, scorn possessions, save thyself;  
Tear down thy house, and build a ship;  
Let it be well-measured."

He describes the ship he built, and from all principles of naval architecture, it was a ship which could not be tipped over — square! After he built it, he launched it on no less than *eight* shakedown cruises; each time he would bring it back, caulk it with bitumen, and check it out again. Finally he had it shipshape, so he held a real Belshazzar's feast to celebrate the occasion, with beer, wine, venison, and mutton served to all who came.

Imagine this in your own neighborhood! His neighbors must have thought he was a real nut.

On the very next day after the feast, he decided it was time to load the ship and set sail on the cruise for survival.

"I then loaded the ship.  
The whole harvest of life I loaded  
— My family, my friends,  
The beasts of the field, the cattle of the field,  
The craftsmen, and the tools of their trades —  
I made them all embark.  
I then embarked, and closed the door.  
As soon as a gleam of dawn shone in the sky,  
The skies darkened, black clouds gathered;  
Inside them Adad thundered.



Soon all light had turned to darkness;  
Brother could recognize brother no more,  
The animals of the skies can no longer see each other."

Utnapishtim then describes the onslaught of the storm which generated sheer, all-out terror in the ship. Following that,

"For six days and nights  
Wind and flood marched on,  
The holocaustic wind overwhelmed the land.  
When the seventh day dawned,  
The ill wind was stilled; the oceans, — the flood —  
Which had waged war like an army, was ceased.  
I opened the window, and beheld the devastation,  
And all mankind was turned into mud!  
As high and as flat as the rooftops lay the swamp!  
And thousands of dead —  
Of man, and beast, and cattle —  
Lay floating in the mire!"

He then proceeds to describe the bumping into the mountain, the releasing of three birds, the bringing back of the leaf; followed by the disembarkation, the building of an altar — and more.

Undoubtedly the story is the primeval version of Noah's flood, written thousands of years before the Hebrews wrote their abbreviated version which we find in Genesis. One of the most important things about it is that we have a firsthand, on-the-spot report of the laying down of a strata such as we see exposed in the Grand Canyon, with a vivid description of wind and inundation which have to be part of the event. Language scholars say that for anyone to write such a description, *he had to be there and see it with his own eyes.*

More important, the great archaeologist Leonard Woolley found Utnapishtim's rooftop-high layer of mud in the 1920's — by then clay, about nine feet thick — in the Tigris-Euphrates Rivers region; beneath it a civilization which was buried, and totally different from any ever found above it.

Now about the story from two cataclysms ago. Historians tell us that for a 5000-year period before 6,500 years ago there is no written history from anywhere in the world. India, Greece, and Egypt follow this characteristic. It's interesting that 6,500 plus 5,000 equals 11,500 years ago, isn't it?



In light of the priests of Egypt telling Solon of a great antedeluvian Hellenic civilization, let's take a look at the Greek alphabet. It is written today as it has been for all of written Greek history; but the pronunciation is not the same. Around the time of Euclid, the pronunciation was changed to match the "slang" of their time, it is told. Let's compare the modern pronunciations with the old:

Alpha	Alpaaha	(Al- <i>pah</i> -ah-ha)
Beta	Beta	(Bay-tah)
Gamma	Kamma	(Kahm-mah)
Delta	Telta	(Tell-tah)
Epsilon	Epzilonom	(Ep-zill- <i>oan</i> -om)
Zeta	Zeta	(Zay-tah)
Eta	Etha	(Ayt-ha)
Theta	Thethehaha	(Thay-thay- <i>ha</i> -ha)
Iota	Iota	(Eye- <i>oh</i> -ta)
Kappa	Kapaa	(Kah- <i>pa</i> -ah)
Lambda	Lambeta	(Lahm -bay-tah)
Mu	Mu	(Moo)
Nu	Ni	(Nee)
Xi	Xi	(Ksee)
Omicron	Omikleon	(Oh-mik- <i>lay</i> -on)
Pi	Pi	(pie)
Rho	Laho	(Lah-hoe)
Sigma	Zilkma	(Zee-ik-ma)
Tau	Tau	(Tah-oo)
Upsilon	Upazileon	(Oo-pa-zee-lay- <i>ohn</i> )
Phi	Pehi	(Pay-high)
Chi	Chi	(Kigh)
Psi	Pezi	(Pay-zigh)
Omega	Omecka	(Oh- <i>mec</i> -ka)

If you read the old pronunciations out loud, it sounds very much like Polynesian! Plausibly, it is a summation of prehistoric Mayan words, which we can translate to English. We find that perhaps it tells the story of the cataclysm which ended the Laurentian ice age, started the old stone age, ended the Australian ice cap, and initiated the abrupt climatic change over almost the whole world. Of course it was the cataclysm through which Adam and Eve lived, ending a civilization in the eastern hemisphere. Traces — wisps — of that civilization are found in the legends recorded by the Hindu historian Valmiki, and told by the Polynesian tribes such as the Maoris.

Here, then, is the Greek alphabet:



Overwhelmingly break the oceans;  
They inundate the lands.  
Mother earth receives  
the deep. Where  
obstructions are, shores form. Mighty winds  
rampage, where  
with oceans  
piling over oceans, they  
bury all that is living and moving. Where  
hills are, they vanish,  
buried, submerged with the earth of  
the motherland.  
Mountain peaks alone  
stand forth before  
the onslaught on our planet  
which abates little by little  
until there comes  
the cold wind. The motherland  
is now at the bottom of the earth,  
an abyss, a vast reservoir of frozen  
mud. There comes  
out of volcanoes  
vapours pouring forth,  
with swirling smoke, and molten lava.

The story apparently was handed down verbally, generation to generation, through the 5,000-year period of no written history, and after Noah's flood, when history started to be written again, became the basis for the Greek alphabet.

Factual, legendary, or mythological, whichever it may be, the story is fascinating, isn't it? If you wish to pursue it further, read Juarequi's "History of Central America" and Churchward's "The Lost Continent of Mu". Churchward makes many mistakes, but his works are interesting reading. His treatment of the Calendar gate of Tiahuanaco makes one question his sometimes cursory methods.

History before the cataclysm of 11,500 years ago comes to us in the form of legends; we can understand those legends and their origins far better in the light of the history of cataclysms. The Greek alphabet has existed in two written forms through all of Greek history. Where did it come from before that? Perhaps the answer lies in the megaliths, runes, and glyphs ranging from the Matto Grosso to Deutschland, Finland, England, and Friesland. Prehistoric secrets of the Hellenes!



Now we must leave the pleasures of speculation and return to more serious considerations.

All of the datings of past cataclysms give us clues upon which to base some predictions for cataclysms to come. Before we delve into that, however, let's discuss the most elusive piece of the puzzle, the part which has taken us twenty years to find and fit into the puzzle: the trigger, the cause of cataclysms.

My thoughts go back to Georges Cuvier's challenge to the world of science which he wrote in 1812: " . . . . discover the cause of these events." Dr. Hibben's contemporary adjunct to that challenge is really an inseparable part of it: "Any good solution to a consuming mystery must answer *all* of the facts."

As the years went by and we remained dissatisfied with our concepts concerning the trigger, we concentrated on that part of the puzzle. It has taken almost twenty years to find a satisfactory solution — one which answers all of the facts.

The fascinating pioneering work of the Swedish physicist Hannes Alfven lighted the tortuous path to the answer. In the 1950's he discovered a kind of energy nobody even thought existed, which he labeled "magnetohydrodynamic" energy. Abbreviated, it's called mhd energy. Actually, it's a combination of magnetic, electrical, and physical forces.

It can be described best with what I call a "kitchen example". Suppose you took a glass cylinder of mercury at room temperature — and everyone knows it's "molten" or liquid under those conditions. It's so dense that you can float a glass mirror on top of it. So let's do just that, and put some scratches on the mirror. If you shine a light down on the mirror, the light beam will reflect to the ceiling and show images of the scratches in the mirror on the ceiling.

Now let's put an agitator — like a miniature version of a washing machine agitator — in the bottom of the cylinder of mercury, with a shaft or axle going through the bottom of the cylinder to the agitator, and a handle on the end. We can twirl the agitator back and forth with the handle (slowly only, because the mercury is so heavy) and agitate the mercury in the glass cylinder.

When we agitate the mercury in this fashion we find that the slipperiness within the mercury — atom to atom — is so great that all of the motion of the agitator is absorbed by the mercury before it ever reaches the top surface where the mirror is. The mirror won't even budge.



If we wind a wire around the glass cylinder and connect it to a battery, we will have an electromagnet — following the same principles used in the doorbell in your home. There is an electric current flowing around the cylinder, and a magnetic field going through the cylinder of mercury, end to end.

Now we find that things have changed. When we rotate the agitator back and forth the mercury acts as if it were a plastic — or near-solid. The mirror makes all of the moves that the agitator does, showing that the mercury has lost its internal slipperiness, and is moving integrally as if it were almost solid.

Alfven tried a refined version of this experiment in his laboratory, and this is how the phenomenon was discovered. It was first reasoned that tiny electrical charges, called "eddy currents", were being generated in the mercury, which in turn were generating tiny local opposing magnetic fields, and this was causing the solidifying effect. He reasoned that if this were true, the larger the diameter he made the glass cylinder, the bigger the electric current and the stronger the magnetic field would have to be to maintain the same physical force link between the agitator and the mirror.

He built another agitator vessel with a larger diameter cylinder of mercury — and found the *reverse* to be true! The larger the diameter of the cylinder, the *less* magnetic field strength and electric current needed to maintain the physical force link between agitator and mirror. This seemingly broke all the rules of known Physics and Engineering.

Hannes Alfven found that he had discovered the existence of a kind of energy, traveling from the agitator to the mirror, which was previously undetected by any scientist. His rigorous mathematical work in expanding James Clerk Maxwell's three ingenious equations for expressing electromagnetic radiation (radio broadcasts to you) showed that there were electrical, magnetic, and physical force fields acting as one between the agitator and mirror.

Alfven expanded his mathematical research to show that space is literally a sea of mhd energy, and that, as weak as the magnetic field of any blue-white star is, it is strong enough to support an internal mhd energy structure within the star.

Alfven's work also applies to any planet with an organized magnetic field — that is, with one North and one South Pole. Its field is strong enough to support an mhd energy structure in the planet. Moreover, I have built several earth current measuring stations, and know from personal observation that the corresponding electric currents in the earth are strong enough to support our planet's inner mhd energy structure.



Now we know that the molten layers inside the earth act just like the cylinder of mercury in Alfven's experiment. As long as they are permeated with mhd energy, they act as if they are plastic, or near-solid.

We also know that the shell of the earth — which includes the oceans, the crust, and a teeny part of the mantle — is not dynamically balanced as it stands today. Rough computations show that there is a torque of  $48.6 \times 10^{15}$  ton-miles tending to rotate the shell about the earth's interior; Greenland and Antarctica could move toward the equator in less than half a day were the shell free to make the shift.

As long as the inner mhd energy structure remains strong enough to make the molten layers act as near-solids the shell will not shift its position about the earth's interior. To be sure, the shell is shifting gradually; the subject is covered excellently in the paper "Latitude and Longitude, and the Secular Motion of the Pole" by Dr. Markowitz of the U.S. Naval Observatory in Washington, D.C.

However, at the time of a cataclysm the entire Solar System passes through a magnetic null in the Milky Way Galaxy. These nulls are sometimes popularly called "reversals". Some physicists are beginning to suspect that we are heading into another null zone at an accelerating rate. In any case, when going through a null, our planet's inner mhd energy structure is diminished to the extent that the outer, shallow molten layer is allowed to act as a free liquid. No longer does it bind the shell to the earth's interior — as the interior was bound through the mercury to the agitator in Hannes Alfven's experiment by mhd energy.

The shell of the Earth is freed to find a new dynamic balance about the Earth's interior. It shifts in the direction the imbalance of the shell dictates it must go to find its new balance — and the liquid molten layer beneath the outer solid shell lubricates the shift all the way.

The trigger, then, is our planet's passage through a galactic-scale null zone, diminishing the earth's inner mhd energy to so low a level that the shallow molten layer is allowed to act as a liquid lubricating layer between the earth's shell and interior.

During each cataclysm the shell finds its new dynamic balance, which is resolved when the shell has shifted to a position with the ice caps rotating equatorially and melting in the heat of the Torrid Zone. As they melt relatively fast, and they usually total around eight million cubic miles of ice (as they do today), the oceans the world over rise about 200 feet with the new-found water.

New polar ice caps form on the areas moved into the polar regions; they will not be centered with the axis of rotation, so a new, growing



imbalance is created, to be resolved when the Earth, with the entire solar system, passes through another null zone.

Regarding the shallow molten layer, some geophysicists and seismologists challenge its existence. In 1924 the great seismologist Beno Gutenberg derived from his earthquake records that the layer must be there. Since then, Hawaiian seismologists have said "Of course! — It's the source of the molten stuff volcanoes spew forth!" and other seismologists say "Well-l-l, it's there, but it's not molten, it's plastic, or near-solid." They're both right. It's molten, and acts as a near-solid because of its mhd content.

Oceanography gives the answer: IGY data shows that oceanic tides the world over depress the ocean floors three-tenths of the increase in depth of the water between low and high tides. The molten layer has to be beneath the ocean floor for the floor to be pushed into the Earth by just a few feet of water.

As surely as there is life left in the universe, there is in our Milky Way Galaxy; and as surely as there is life in the galaxy, our Solar system will traverse another null zone in it — indeed many more. This brings us to the subject of the next cataclysm.

As mentioned before, Hale's mathematical analysis lengthens the Wisconsin era to 14,750 years long. The last cataclysm — Noah's flood — would appear to be 6,970 years ago rather than 6,500 years ago. Adam and Eve's cataclysm — the end of the Laurentian ice age — appears close to 11,520 years ago. Hale's mathematics shows the null zone vs. time structure to be helicoid; and, as the universe approaches its half-life point, cataclysms occur at an increasing frequency, with shorter time periods between them. After the universe has passed its half-life, cataclysms occur at a decreasing frequency, with time periods between them increasing in a mirror-image pattern of the first half-life of the universe.

It appears that the half-life of our universe occurred in the middle of the Sudan era, which means that we are in the first of the longer spans between cataclysms after the half-life point. We can now reconstruct the table on page 17 to show seven eras: four in the past, the present, and two in the future:



<i>North Polar Eras (Areas at N. Pole)</i>	<i>Start (Yrs. to and from now)</i>	<i>End</i>	<i>Duration (Yrs.)</i>
Unknown	+10,530	+25,280	14,750
Bay of Bengal	+30	+10,530	10,500
Arctic Ocean	6,970	+30	7,000
Sudan Basin	-11,520	-6,970	4,550
Hudson Bay	-18,520	-11,520	7,000
Caspian Sea	-29,020	-18,520	10,500
Wisconsin	-43,770	-29,020	14,750

Of course there were many eras preceding the Wisconsin era, and there will be an equal number following the Unknown-area era.

You can see that the dark period of no written history was the Sudan Basin era. Let's look at prehistory from a different viewpoint now — from the standards of our present civilization.

We can see that it takes 5,000 years just for man to stagger back to his feet through a stone age and forced ignorance. It takes him another 1,000 years just to learn to travel, and another 500 to 900 years to learn to travel intelligently, to begin to overcome superstition, to establish worthwhile communications, to bury prudery enough to make any significant progress in medicine. The progress of civilization can be measured by the change in man's attitude toward woman in childbirth; read "Devils, Drugs, and Doctors" by Howard W. Haggard, M.D. I can remember when the Obstetrician was considered the lowest of the low in the medical profession. The male inferiority complex is manifested throughout history from the Old Testament, through property rights laws, through modern warfare. Has he outgrown it yet?

If we look at our technical accomplishments — which have taken us slightly over 6,900 years to achieve — think what we could do if we had 10,500 years. We would be in space as commonly as we walk around the block. Fossil fuels would belong to the dead past; controlled gravity and natural magnetism would be the means for propulsion and power generation, as we would have learned the processes of nature sufficiently to duplicate them in controlled fashion for our uses.

It appears from the legends passed on to us of the Caspian era that man did just that with the 10,500 years he had. Valmiki writes of vimanas and space chariots, of the Brahma Weapon and Indra's Dart, of "celestial chariots" and more. Legends of Mu and Atlantis, of great technical achievements as well as moral perversions beyond comparison, spring from this era. Some of the legends carry over into the 7,000-year Hudson



Bay era, showing some retention of knowledge through the cataclysm of 18,500 years ago.

If we look to Nostradamus (who didn't make mistakes), we find that his predictions end about year 2000 A.D. Whether we accept him or not, Edgar Cayce predicts a cataclysm about year 1999. Hale's mathematics indicates one to be coming about year 2000 A.D.

As far as I'm concerned, I'm not satisfied with these figures; to me the next cataclysm is due sometime between 30 and 500 years from now. If I had my "druthers" — meaning if we had the funding — I would put the entire subject into an intensive, all-out applied mathematics program to determine precisely how much time we have before the next cataclysm; then undertake an intensive study to determine what we must do to survive it. That's what I'd want to do.

Wouldn't you?



## Recommended Reading

The Bible	All Versions
The Bible as History	Werner Keller
Sex and Family in the Bible	Raphael Patai
Mysteries of Ancient South America	Harold T. Wilkins
Secret Cities of Old South America	Harold T. Wilkins
Gods, Graves, and Scholars	C. W. Ceram
How Old is the Earth?	Patrick M. Hurley
The Calendar of Tiahuanaco	H. S. Bellamy & P. Allan
The Great Idol of Tiahuanaco	H. S. Bellamy & P. Allan
Tiahuanacu, the Cradle of American Man	Arthur Posnanski
Letters on the Physical History of the Earth	J. Andre DeLuc
Essay on the Theory of the Earth	Baron G. Cuvier
Nine Planets	Alan E. Nourse
Design of the Universe	Fritz Kahn
The New Astronomy	A Scientific American Book
Primitive Man and His Ways	Kaj Birket-Smith